

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).
2. (previously presented): A method for wavefront measurement of an optical imaging system by means of a phase-shifting interferometry technique, the method comprising:

at least one of:

moving a phase-shifting structure and a detector element laterally relative to the optical imaging system to be measured, and

moving an object-side mask structure laterally relative to the detector element,

wherein a pupil image offset occurring owing to the relative lateral movement is taken into account by back calculating interferograms, wherein the interferograms are respectively recorded by the detector element, using a phase-shifting characteristic associated with the lateral movement, or

wherein the pupil image offset is taken into account by a computational correction of wavefront derivatives, obtained from the recorded interferograms, in the direction of lateral movement.

3. (previously presented): The method according to Claim 2, wherein the computational correction of wavefront derivatives in the direction of lateral movement is performed using the relationship:

$$I^{(2)}(n) = \cos\left(S_x^{(1)} - \frac{\partial S_x^{(1)}}{\partial x} \frac{\Delta x(n-1)}{N} + \frac{2\pi(n-1)}{N}\right),$$

which specifies the intensity values $I^{(2)}$ of individual detector element pixels as a function of the n th lateral phase shift with $S_x^{(1)}$ as errored wavefront derivative in the phase-shifting direction, from which an error-corrected wavefront derivative ($S_x^{(2)}$) is then calculated, wherein N denotes a total number of phase steps.

4. (currently amended): The method according to Claim 2, carried out with aid of a device ~~according to Claim 1~~ comprising:

a mask structure which is arranged on an object side, and

a grating structure which is arranged on an image side,

wherein the mask structure which is arranged on the object side comprises one or more mask structure patterns with a periodicity in exactly one direction, and the grating structure to be arranged on the image side comprises one or more grating structure patterns with a periodicity in exactly two non-parallel directions, or

wherein the mask structure comprises one or more mask structure patterns with a periodicity in exactly two non-parallel directions, and the grating structure comprises one or more grating structure patterns with a periodicity in exactly one direction.

5. (currently amended): The method according to Claim 3, carried out with aid of a device ~~according to Claim 1~~ comprising:

a mask structure which is arranged on an object side, and

a grating structure which is arranged on an image side,

wherein the mask structure which is arranged on the object side comprises one or more mask structure patterns with a periodicity in exactly one direction, and the grating structure to be arranged on the image side comprises one or more grating structure patterns with a periodicity in exactly two non-parallel directions, or

wherein the mask structure comprises one or more mask structure patterns with a periodicity in exactly two non-parallel directions, and the grating structure comprises one or more grating structure patterns with a periodicity in exactly one direction.

6. (canceled).